REMARKS

Claims 27, 32, 40-42, 44, 46, 48, 50, and 52 have been amended. No new matter has been added.

Claims 58-61 have been canceled.

Claims 27, 29-42, 44-46, 48-50, and 52-54 are pending in the application.

Claims 27, 29-42, 44-46, 48-50, and 52-54 are rejected.

Rejection of Claims under 35 U.S.C. § 103

Claims 27, 29-42, 44-46, 48-50, and 52-54 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Krishnamurthy, U.S. Patent No. 6,823,436 (hereinafter referred to as "Krishnamurthy"), in view of Miyata et al., U.S. Publication No. 2003/0225972 (hereinafter referred to as "Miyata"). Applicants respectfully traverse this rejection.

Amended claim 27 recites: "performing the operation upon a given location in the first set of locations... only if the given location is described in at least one location description" and "the at least one location description has a corresponding property identifying the operation." The Final Office Action mailed May 12, 2006 (referred to herein as "FOA") states that Miyata teaches a location description that has a corresponding property describing a type of operation. FOA, p. 3. However, as discussed in more detail below, neither Krishnamurthy nor Miyata teaches a location description that has a corresponding property describing a type of operation.

The Examiner cites Fig. 2, paragraphs 50-56, Fig. 4, Fig. 11, and paragraphs 87-91 of Miyata as teaching a location description that has a corresponding property describing a type of operation. FOA, p. 3. These portions of Miyata describe a metadata structure with attribute fields. Element 402 in Fig. 4 is a file attribute array region that is within metadata region 404. Fig. 2 is "a table of block attributes stored in the disk unit." Miyata, paragraph 41. However, nothing in the description of Fig. 2 (paragraphs 41-43) teaches or suggests that the block attributes describe operations for the corresponding data blocks. Paragraph 52 discusses the contents of the file attribute array region: "In the file attribute array region 402, there are registered the data representing the kind of file, date the file is written, owner of the file, right for

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making a reference to the file, and array of the data block numbers." None of these attributes describes an operation for the corresponding data blocks. The Office action suggests that the attributes describe a duplicate operation. However, paragraphs 50-56 do not mention a duplicate operation. Thus, Fig. 2 and paragraphs 50-56 do not teach a location description having a corresponding property describing the operation to be performed, as described in amended claim 27.

Applicants also submit that Miyata's Fig. 11 and paragraphs 87-91 do not teach that the attribute fields describe an operation that can be performed on the corresponding data blocks. Fig. 11 is "a flowchart for registering/resetting the duplicating function." Miyata, paragraph 87. Paragraph 86 describes an attribute bit 203, which "has a meaning of the necessity of forming a ditto, forming the ditto when the value thereof is 1, and not forming the ditto when the value thereof is 0." Thus, attribute bit 203 indicates when a ditto should or should not be formed. A ditto is a duplication of the metadata: "[W]hen the ditto of the file N is to be registered, the host computer 13 conducts the processing for duplicating the metadata 404 of the file system prior to duplication the file." Miyata, paragraph 89. Accordingly, attribute bit 203 indicates whether metadata for a file should be duplicated, but does not control whether the corresponding files should be duplicated. In contrast, in amended claim 27, an operation is performed on a given location only if that location is identified in the location description that includes the property identifying the operation to be performed.

Furthermore, Miyata's attribute bit is not comparable to the property recited in claim 27. Amended claim 27 recites that the operation is performed upon a "given location in the first set of locations . . . only if the given location is described in at least one location description." In other words, the location description is a description of the same data that the operation is performed on, and the operation will not be performed on the given location unless the given location is described in the location description. Thus, if the given location is not described in the location description, the operation is not performed on that location. Miyata's attribute fields (metadata), in contrast, are descriptive of an array of data block numbers, but attribute bit 203 indicates whether the metadata itself is to be duplicated, not whether the data block is to be duplicated. Thus, Miyata's metadata identifies a file, but does not have a corresponding property describing an operation to be performed on that file. Therefore, Miyata does not anticipate, teach, or suggest "at least one location description [that] has a corresponding property identifying

the operation," as recited in claim 27. The cited portions of Krishnamurthy, both alone and in combination with the cited portions of Miyata, also fail to teach or suggest such a feature. For at least the foregoing reason, amended claim 27 is patentable over the cited art.

Applicants also submit that a combination of Miyata and Krishnamurthy fails to establish a prima facie case of obviousness because neither reference provides any motivation to combine their disclosures to provide the features of claim 27. The Final Office Action states: "It would have been obvious to one of ordinary skill in the art at the time of invention to include system management modules and metadata structures as suggested by Miyata in Krishnamurthy's system to allowing [sic] users specifying the operations for the corresponding data duplicates the data stored in the storage unit into a separate medium in a high-speed manner (Miyata's paragraphs 6-8)." FOA, p. 4. However, Krishnamurthy already provides snapshot management modules and metadata structures. *See* column 3, lines 17-21 and column 4, lines 1-60. Thus, it is unclear why Krishnamurthy would look to Miyata to provide these functions.

Furthermore, the Final Office Action incorrectly suggests that the paragraphs 6-8 of Miyata teach that management modules and metadata structures allow users to specify operations in a high-speed manner. In paragraph 6, Miyata states that "having the file reside in the main storage, therefore, the file can be executed at a high speed." In paragraph 8, Miyata states, "When the storage unit is provided with a cache, therefore, it becomes possible to make a reference to the data at a high speed." Thus, Miyata, in paragraphs 6-8, teaches that using a cache allows a file to be executed at high speed (as is very commonly known), but does not teach that management modules and metadata structures improve operation speed. Indeed, since Miyata teaches the previously described metadata copying operation, adding the features of Miyata's system to Krishnamurthy's system might actually slow down Krishnamurthy's system as a result of performing the extra copying operation. Thus, Applicants submit that one of ordinary skill in the art would not be motivated to combine the disclosures of Krishnamurthy and Miyata for the reason provided in the Final Office Action. Furthermore, Applicants are unable to find any motivation in either reference for combining their disclosures to provide the features of claim 27.

Accordingly, Applicants submit that the Office action fails to establish a prima facie case of obviousness. Thus, Claim 27 clearly distinguishes over any permissible combination of

Krishnamurthy and Miyata. Applicants submit that these arguments apply with equal force to independent claims 42, 46, and 50. Thus, independent claims 27, 42, 46, and 50 are allowable for at least the foregoing reasons. Accordingly, the respective dependent claims 28-41, 43-45, 47-49, 51-54, and 58-61 are allowable for at least the same reasons that claims 27, 42, 46, and 50 are allowable.
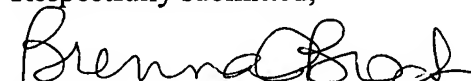
CONCLUSION

In view of the amendments and remarks set forth herein, the application is believed to be in condition for allowance and a notice to that effect is solicited. Nonetheless, should any issues remain that might be subject to resolution through a telephonic interview, the Examiner is invited to telephone the undersigned at 512-439-5087.

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on July 10, 2006.

Attorney for Applicant(s) Date of Signature

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